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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BEFUMO, JENNA LEIGH

ART UNIT

PAPER NUMBER

1771

DATE MAILED: 05/02/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/938,299

Applicant(s)

WILDEMAN, MARTIN

Examiner

Jenna-Leigh Befumo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 and 18-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1 – 10 and 18 – 26, drawn to a method of producing a texturized fabric, classified in class 26, subclass 29 R.
 - II. Claims 11 – 17, drawn to a texturized fabric, classified in class 428, subclass 89.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product can be made by using a protective coating other than size, such as ice, to form the unnapped areas.
 3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
 4. During a telephone conversation with Timothy Cassidy on March 27, 2003 a provisional election was made with traverse to prosecute the invention of group II, claims 11 – 17.
- Affirmation of this election must be made by applicant in replying to this Office action. Claims 1 – 10 and 18 – 26 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

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Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 11 – 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. The term “unnapped” in claim 11 is indefinite. Does the Applicant mean that the “unnapped” regions have no fibers at all, extending from the surface of the fabric? Or does the “unnapped” region have some fibers which have been raised from the surface of fabric, but as compared to the napped region it is relatively “unnapped”? Does the size coating added to the fabric absolutely prevent all fibers from being raised from the surface of the fabric? Particularly, it is noted that prior art which teaches adding size to the surface of the fabric (Dischler et al. US 6,260,247) also discloses that the portions with size will be nicked to some degree, producing raised fibers. Therefore, it is unclear if the Applicant is adding size so that it will completely prevents the fiber from being raised during the napping process or if the Applicant is instead raising a minor amount of fibers in the “unnapped” regions. For purposes of examination, the term “unnapped” is interpreted as meaning that a small amount of fibers can be raised during the napping process, but the “unnapped” region has significantly less fibers than an untreated region which has also been napped. Claims 12 – 17 are rejected due to their dependency on claim 11.

8. Claim 13 is indefinite. While the Applicant claims that the size is placed on the fabric prior to processing, it is unclear if the final product has size in the “unnapped” regions. Is the size removed to produce the final product? Is the Applicant claiming that the fabric still has size

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in the “unnapped” regions. For purposes of examination the claim is interpreted as having size in the “unnapped” regions.

9. The phrase “chain stitch” in claim 17 is indefinite. It is unclear what structure the Applicant is claiming by using the term “chain stitch”. Wouldn’t any stitch which interlocks with an adjacent stitch, thus forming a chain, qualify as a chain stitch? Wouldn’t that mean any knit fabric is made up of chain stitches? How does a chain stitch differ from other stitches in knit fabrics?

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 11, 12, and 14 – 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu et al. (4,743,483) in view of *Understanding Textiles, Fourth Edition* (Phyllis G. Tortora, pages 354 – 355).

Shimizu et al. discloses a fabric which has been treated to provide a napped pattern on the surface (column 1, lines 39 – 40). The napped fabric has a pattern on at least one surface having an area with a nap surface, which corresponds to the Applicants napped region, and an area with a reversed nap surface, which corresponds to the Applicants unnapped region. (column 1, lines 45 – 50). The reversed napped region is formed by impinging a fluid jet stream on the fabric to fabric’s surface in a pattern, which forces the napped fibers to extend into the base layer, leaving the surface in these regions “unnapped” (column 3, lines 20 – 33).

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The fabric can be woven or knitted fabrics such as warp knitted tricot fabrics (column 2, lines 21 – 23). For flexible fabrics, Shimizu et al. discloses that the yarns has a denier of 100 or less (column 2, lines 34 – 35). And in Example 10, Shimizu et al. discloses using multi-filaments yarns having a denier of 50 or 190. Shimizu et al. fails to teach the number of yarns in the warp knit fabric and the number of rows per inch.

Understanding Textiles is drawn to knitted fabrics. Specifically, it teaches that tricot warp knitted fabrics are made from machines having one to four guide bars (page 355). The number of guide bars corresponds to the number of yarns in the fabrics, i.e., a two-guide bar machine uses two yarns. Further, a single-guide bar structure is almost never used since the fabric has poor strength and a lack of stability (page 355). Two-guide bar structures are stable and light in weight, while three and four guide bar structures are heavier and used for dresses and men's clothing. Therefore, it would have been obvious to one of ordinary skill in the art to use at least two guide-bars, which would use at least two yarns, in the warp knit tricot fabric taught by Shimizu et al. since the fabric would have better strength and stability properties than a fabric made with one guide-bar and thus one yarn. Therefore, claims 11, 12, 15, and 16 are rejected. Claims 17 is also rejected since the stitches in the warp knit fabric are formed by linking the stitch loops together to form a chain.

Finally, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the number of rows per inch claimed by the Applicant, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). Further, one of ordinary skill in the art would want to optimize

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the strength and cover area of the fabric by increasing the number of rows per inch, while keeping the fabric weight as low as possible by limiting the number of rows per inch. Thus, claim 14 is rejected.

12. Claims 11 – 14 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dischler et al. (6,260,247) in view of *Understanding Textiles*.

Dischler et al. teaches immobilizing surface fibers in a fabric with size or ice to modify the appearance of the napped fabric (column 4, lines 5 – 17 and column 5, lines 7 – 11). Further, the immobilization step can be applied selectively to a fabric's surface to produce particular designs, textures, or appearances (column 6, lines 57 – 62). The fibers are immobilized by adding size in different patterns with areas of non-immobilized fibers and then the fabric is napped to form logos or designs (column 7, lines 1 – 7). This would produce areas with a minor amount of napped fibers, or the "unnapped" region, and areas which have been heavily napped, or the napped region. The invention can be practiced on a myriad of fabrics including woven and knit fabrics (column 7, lines 13 – 21). The fabrics can be made from various synthetic or natural fibers without limitation (column 7, lines 14 – 15).

While Dischler et al. discloses that the fabric can be a knit fabric made from various materials without limitations, Dischler et al. fails to explicitly teach using a warp knitted fabric with at least two yarns, and having the claimed yarn size and number of rows per inch. However, *Understanding Textiles* teaches that warp knit fabrics have a better resistance to running since the stitches are connected to more than one stitch around it (page 354). And as set forth above fabrics made from two or more guide bars have better strength and stability properties. Finally, tricot fabrics account for the largest quantity of warp knits (page 355). Thus,

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it would have been obvious to one of ordinary skill in the art to use warp knit fabrics made from two yarns in the invention taught by Dischler et al., since Dischler et al. suggests that any knit fabric can be used and *Understanding Textiles* teaches that warp knit fabrics made with at least two guide bars have better strength and stability properties and are more resistant to running. Further, it would have been obvious to use either a tricot warp knit fabrics since tricot warp knit fabrics account for the largest quantity of warp knit fabrics. Therefore, claims 11 – 13 are rejected. Claim 17 is rejected since the stitches in the warp knit fabric are formed by linking the stitch loops together to form a chain.

Finally, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the number of rows per inch claimed by the Applicant, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). Further, one of ordinary skill in the art would want to optimize the strength and cover area of the fabric by increasing the number of rows per inch, while keeping the fabric weight as low as possible by limiting the number of rows per inch. Thus, claim 14 is rejected.

13. Claims 15 and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Dischler et al, in view of *Understanding Textiles* as applied to claim 11 above, and further in view of Shimizu et al.

Dischler et al. fails to teach the yarn size and using multifilament yarns. Shimizu et al. is drawn to patterned napped fabrics. The features of Shimizu et al. have been set forth above. Shimizu et al. discloses using multifilament yarns with a denier of 100 or less for flexibility.

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Therefore, it would have been obvious to one of ordinary skill in the art to use multifilament yarns with a denier of less than 100 as taught by Shimizu et al., in the invention of Dischler et al. since Shimizu et al. teaches the multifilament yarns of less than 100 denier have good flexibility properties. Thus, claims 15 and 16 are rejected.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (703) 605-1170. The examiner can normally be reached on Monday - Friday (9:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Jenna-Leigh Befumo
April 30, 2003



CHERYL A. JUSKA
PRIMARY EXAMINER

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